

IN THE CLAIMS:

Please cancel claims 60 – 77. Please add claims 78 – 95, as follows:

Claims 1 - 77 (canceled).

78. (new) A system, comprising:

a client device, the client transmitting a request for an operating system utilizing the BOOTP protocol;

a pre-boot execution environment (PXE) agent device, the PXE agent device located on a first local area network with the client device, to receive the BOOTP request for the operating system, to open a hypertext transport protocol (HTTP) session, to convert the BOOTP request for the operating system to a HTTP request for the operating system; and to transmit the HTTP request for the operating system; and

a pre-boot execution environment (PXE) server, the PXE server being located on a second local area network separated by at least one router from the first local area network, to receive the converted HTTP request for the operating system, to retrieve the operating system requested in the converted HTTP request, and to transmit the retrieved operating system via HTTP, wherein the PXE agent device receives the retrieved operating system via HTTP, converts the HTTP protocol to the BOOTP protocol, and transmits the retrieved operating system to the client device utilizing the BOOTP protocol.

79. (new) The system of claim 78, wherein the PXE client and the PXE agent device communicate in a virtual local area network (VLAN).

80. (new) The system of claim 78, wherein at least a switch physically separates the PXE client and the PXE server.

81. (new) The system of claim 78, wherein a first virtual local area network (VLAN) includes the PXE client and a second VLAN includes the PXE server, wherein the first VLAN is distinct from the second VLAN.

82. (new) A method for operating a management server, comprising:  
receiving a pre-boot request from a PXE client, the PXE client requesting booting information;

querying a management database for booting information for the PXE client;

receiving the booting information from the management database if the management database has the booting information for the PXE client, the booting information including instructions to install a specific operating system if the management database has booting information for the PXE client;

transmitting both the instructions to install a specific operating system and the operating system to the PXE client if the management database has booting information for the PXE client; and

transmitting a command for the PXE client to boot locally if the management database does not have booting information for the PXE client and default information in the management server for the PXE client indicates the PXE client should boot locally.

83. (new) The method of claim 82, further including transmitting a command to the PXE client to boot to an operating system on a network if the management information does not have booting information for the PXE client and the management server does not have default information for the PXE client

84. (new) The method of claim 82, wherein one of a switch or a router physically separates the client and the management server.

85. (new) The method of claim 82, wherein a first virtual local area network (VLAN) includes the PXE client and a second VLAN includes the management server, wherein the first VLAN is distinct from the second VLAN.

86. (new) A method for enabling a PXE client, comprising:  
transmitting a request to a management server for booting information; and  
receiving a command from the management server, the command providing the PXE client with the booting information, wherein the PXE client is capable of

loading, in response to the booting information, an operating system software specified by a management database if the management database includes specific booting information for the PXE client;

booting, in response to the booting information, the PXE client from an operating system on a local medium if the management database does not include booting information for the PXE client; and

booting, in response to the booting information, the PXE client from an operating system on a network to which the PXE client is connected if the management database does not include booting information for the PXE client and the management server does not include default information for the PXE client.

87. (new) The method of claim 86, wherein one of a switch or a router physically separates the PXE client and the management server.

88. (new) The method of claim 86, wherein a first virtual local area network (VLAN) includes the PXE client and a second VLAN includes the management server, wherein the first VLAN is distinct from the second VLAN.

89. (new) A method of utilizing a pre-boot execution environment (PXE) agent device, comprising:

receiving a request for an operating system, the client transmitting the request utilizing the BOOTP protocol;

opening a hypertext transport protocol (HTTP) session;

converting the request for the operating system from the BOOTP protocol to a HTTP request which utilizes an HTTP protocol;

transmitting the HTTP request for the operating system utilizing the HTTP protocol to a PXE server, the PXE server being located on a second local area network separated by at least one router from the first local area network;

receiving a retrieved operating system from PXE server utilizing the HTTP protocol;

converting the HTTP protocol to the BOOTP protocol; and

transmitting the retrieved operating system to the PXE client device utilizing the BOOTP protocol.

90. (new) The method of claim 89 wherein the PXE client and the PXE agent device communicate in a virtual local area network.

91. (new) The method of claim 89, wherein a first virtual local area network (VLAN) includes the PXE client and a second VLAN includes the PXE server, wherein the first VLAN is distinct from the second VLAN.

92. (new) A program code storage device, comprising:  
a computer-readable storage medium; and  
computer-readable data, stored on the computer-readable storage medium, the  
computer-readable data including instructions, which when executed, cause a  
processor to:

receive a pre-boot request from a PXE client, the PXE client requesting booting  
information;

query a management database for booting information for the PXE client;

receive the booting information from the management database if the  
management database has booting information for the PXE client, the booting  
information including instructions to install a specific operating system if the  
management database has booting information for the PXE client;

transmit both the instructions to install a specific operating system and the  
operating system to the PXE client if the management database has booting  
information for the PXE client; and

transmit a command for the PXE client to boot locally if the management  
database does not have booting information for the PXE client and default information  
in the management server for the PXE client indicates the PXE client should boot  
locally.

93. (new) The program code storage device of claim 92, including instructions  
which when executed cause the processor to transmit a command to the PXE client to  
boot to an operating system on a network if the management information does not have

booting information for the PXE client and the management server does not have default information for the PXE client

94. (new) The program code storage device of claim 92, wherein one of a switch or a router physically separates the client and the management server.

95. (new) The program code storage device of claim 92, wherein a first virtual local area network (VLAN) includes the PXE client client and a second VLAN includes the management server, wherein the first VLAN is distinct from the second VLAN.

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